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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/700,956

10/31/2003

William D. Holland

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03/31/2009

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

RODRIGUEZ, ARMANDO

ART UNIT

PAPER NUMBER

2828

NOTIFICATION DATE

DELIVERY MODE

03/31/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
mkraft@hp.com
ipa.mail@hp.com

Office Action Summary	Application No. 10/700,956	Applicant(s) HOLLAND, WILLIAM D.	
	Examiner ARMANDO RODRIGUEZ	Art Unit 2828	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-38 and 40-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31 and 32 is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-30, 33-38, 40-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments, see pages 10-12, filed December 12, 2008, with respect to claims 9-12, 14, 15, 17-28, 38, 40-43, 45-47 have been fully considered and are persuasive. The rejection of claims 9-12, 14, 15, 17-28, 38, 40-43, 45-47 has been withdrawn.

The rejection of claims 29, 30 will be maintain none of arguments pertain to independent claim 29 and the arguments presented pertain to a constant drive level, which is not recited in claim 29.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 9-12, 14, 15, 17-20, 22-27, 33-38, 40-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Luque (US 6,198,497).

Regarding claims 1, 2, 4, 33-37.

Figure 1 illustrates a light source (5), a scanning device (1) and a photoconductor, figure 6 illustrates a control circuit having a start-of-scan assembly, which includes photodetector (35) for sampling the single light provided by laser (35), column 3 lines 4-6 discloses maintaining the output power constant [applicant's drive level]. Column 9 lines 9-23 discloses during the adjustment process (calibration) a video

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signal is not applied, which implies after sampling a start-of-scan operation is initiated and the video signal is applied to the photoconductor.

Regarding claims 9, 14, 18, 22, 25, 45-47.

Figure 1 illustrates a rotating scanning device (1), a light source (5), a photoconductor (3), where figure 6 illustrates a control system including a photodetector (35), column 3 lines 4-6 discloses maintaining the output power constant [applicant's constant drive level] and column 6 lines 57-62 discloses a video signal [applicant single line of information].

Regarding claims 3, 12, 24.

Figure 6 illustrates difference generator (28) which compares the output from photodetector (35) with V_{ref1} and V_{ref2} [applicant's circuit configured to compare].

Regarding claims 5, 11, 19, 26, 38.

Figure 6 illustrates a VCSEL (20).

Regarding claims 6, 17, 20, 27.

Column 8 lines 28-30 discloses light measuring during the calibration of the VCSEL, which implies prior to scanning a line of information onto the photoconductor, as described in column 9 lines 11-23.

Regarding claim 7.

Figure 1 illustrates a rotating polygon (1).

Regarding claims 10, 15.

Figure 1 illustrates the light in a single direction.

Regarding claim 16, 44.

Figure 6 illustrates a control circuit having a start-of-scan assembly, which includes photodetector (35) for sampling the single light provided by laser (35), column 3 lines 4-6 discloses maintaining the output power constant [applicant's drive level]. Column 9 lines 9-23 discloses during the adjustment process (calibration) a video signal is not applied, which implies after sampling a start-of-scan operation is initiated and the video signal is applied to the photoconductor.

Regarding claim 23.

Figure 7 illustrates a flow chart to initiate writing, as implied in column 9 lines 9-23.

Regarding claims 40, 41.

Figure 6 illustrates the light source as a laser (20) and the circuitry for controlling the laser.

Regarding claim 42.

Figure 6 illustrates sampling the light source (20) via photodetector (35) and providing a control signal to the light source.

Regarding claim 43.

Column 3 lines 4-6 discloses maintaining the output power constant [applicant's constant drive level].

Claims 29, 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakatsuka et al (US 2002/0024586).

Regarding claim 29.

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Figures 1 illustrates a rotating scanning device (5), a light source (1) [applicant's single light beam], a photoconductor (8), a photodetector (10), a control system (15) where the control system receives an indication of the sampled light from the photodetector for controlling the light source at a power level [applicant's intensity], as illustrated in the flow chart of figure 2 and described in paragraphs [0068]-[0072].

Paragraph [0064] discloses the use of toner particles to form images [applicant's image engine].

Regarding claim 30.

As illustrated in flow chart of figure 2 the laser driving signal generation is performed based on the sampled light.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 21, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luque (US 6,198,497), as applied to claims 1, 18 and 22, in view of Hori (US 5,986,687).

Luque does not explicitly describe the sampling (photodetector) outside the scan area.

However, it is well known in the art to dispose the sampling (photodetector) outside the scan area, as illustrated by Hori in figure 2.

Allowable Subject Matter

Claims 31, 32 are allowed.

The following is an examiner's statement of reasons for allowance:

None of the cited prior arts alone or in combination discloses the claimed invention having the recited limitations of independent claim 31, including among the limitations the processor media having programming to cause the processing circuit to output a control signal, to access an output of a start-of-scan detector, which indicates a timing for initiation of writing, to process the output and to adjust the control signal for adjusting an intensity of the single light beam.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARMANDO RODRIGUEZ whose telephone number is 571-272-1952. The examiner can normally be reached on 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MINSUN HARVEY can be reached on 571-272-1835. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ARMANDO RODRIGUEZ/
Primary Examiner
Art Unit 2828

AR